Fig. 1

FIRST PREFERRED EMBODIMENT

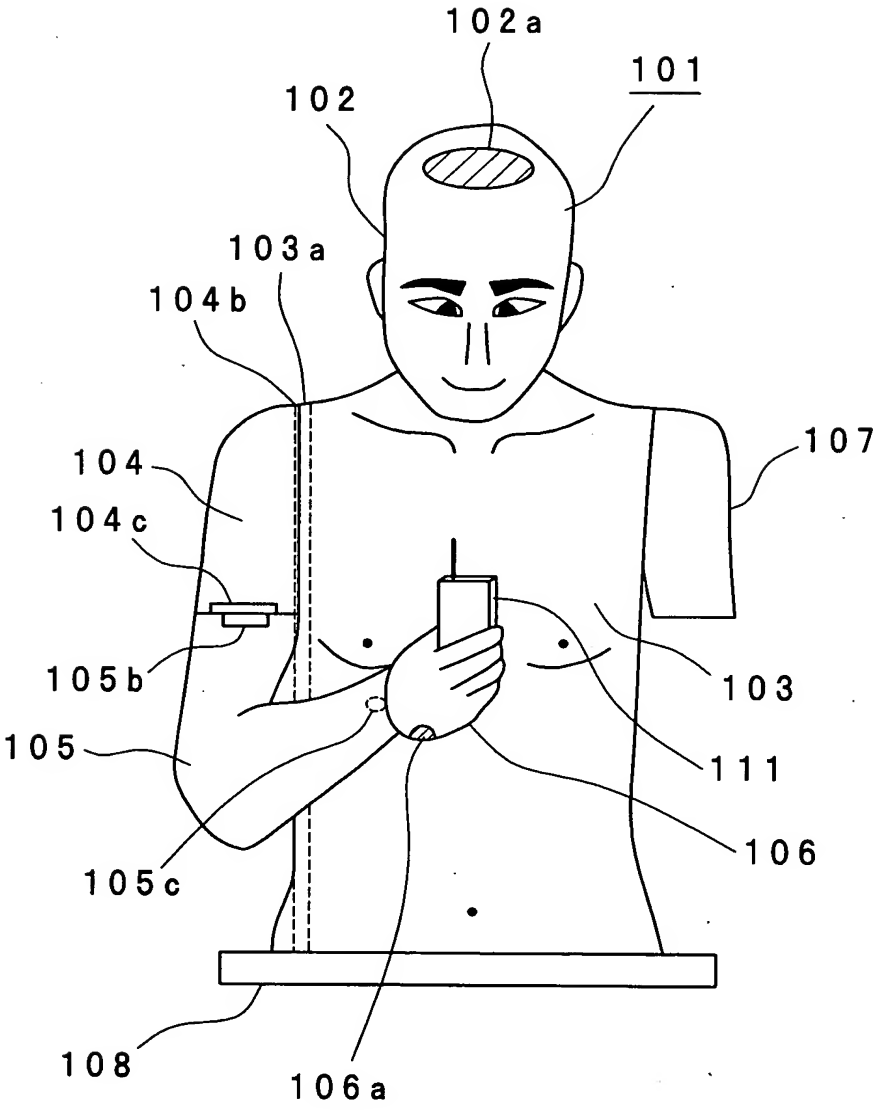


Fig. 2

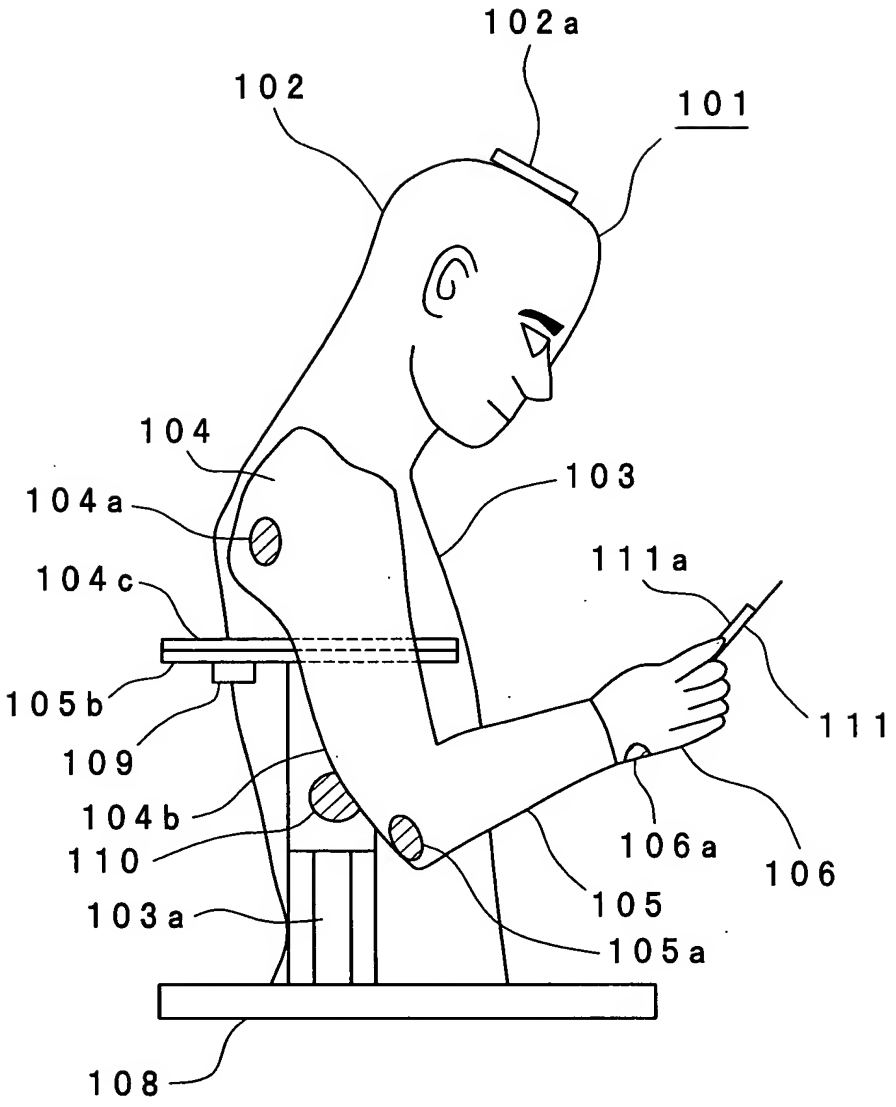

102a
102
101
104
103
104a
111a
104c
111
105b
109
104b
106a
106
110
105
103a
105a
108

Fig. 3

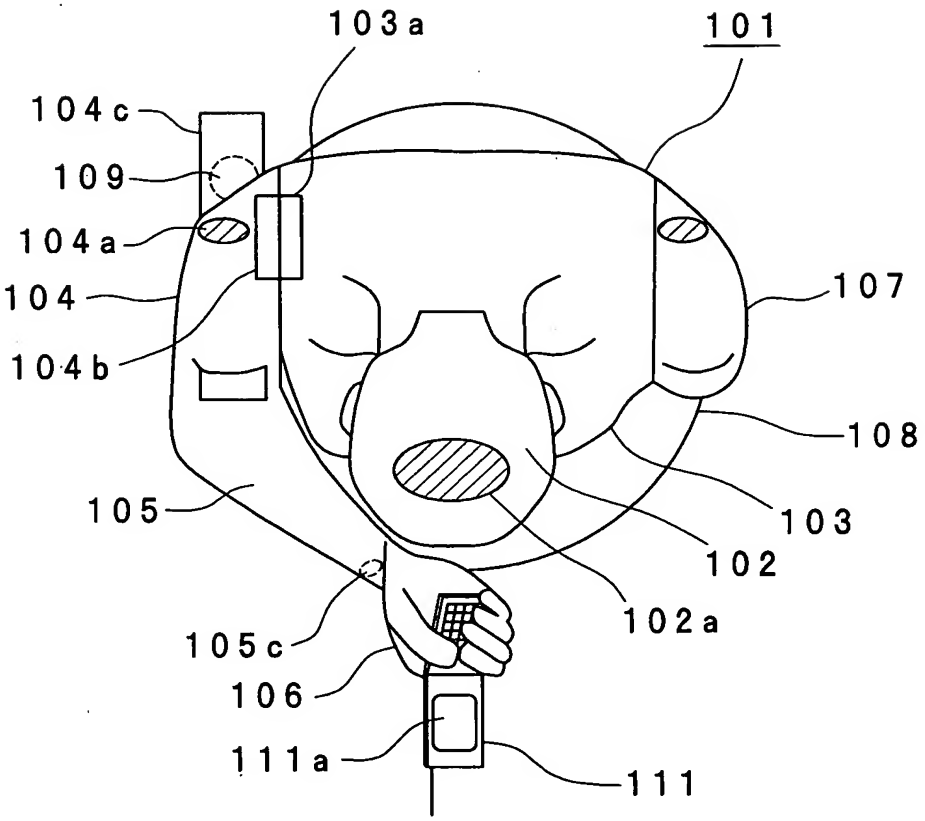

103a
101
104c
109
104a
104
104b
107
108
105
103
102
102a
105c
106
111a
111

Fig. 4

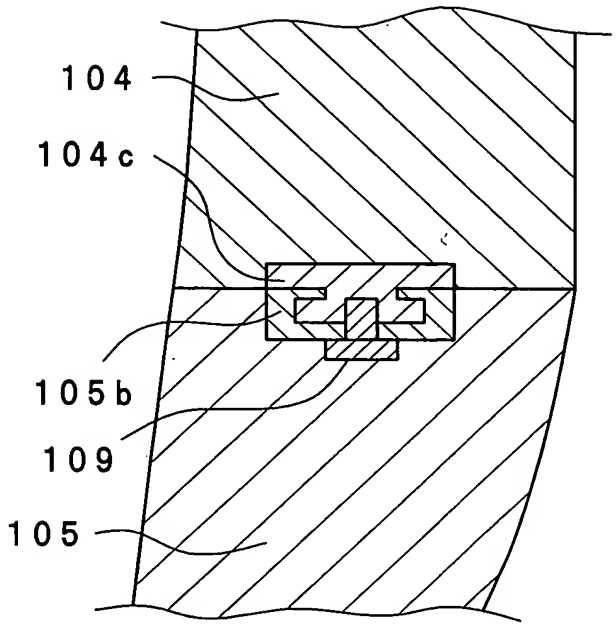


Fig. 5

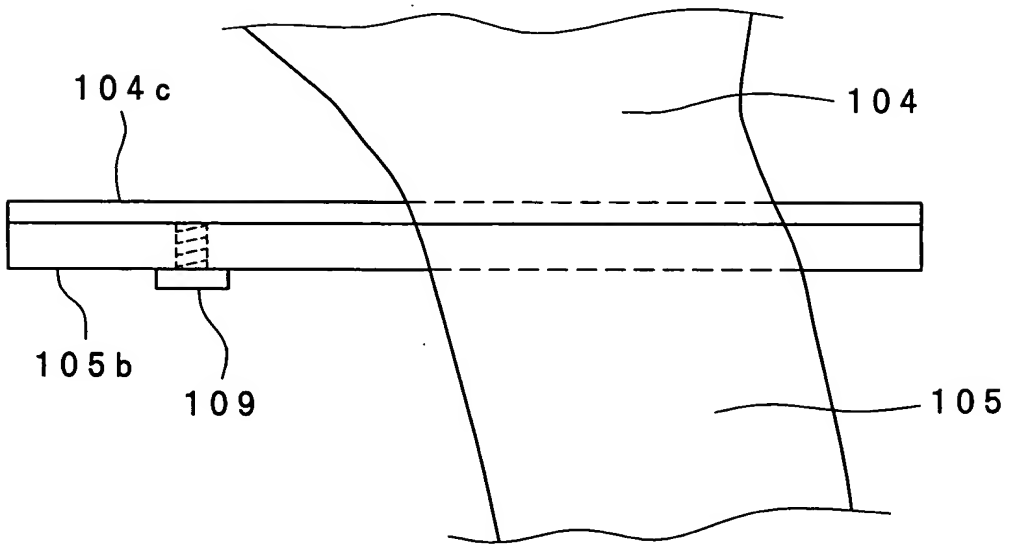


Fig. 6

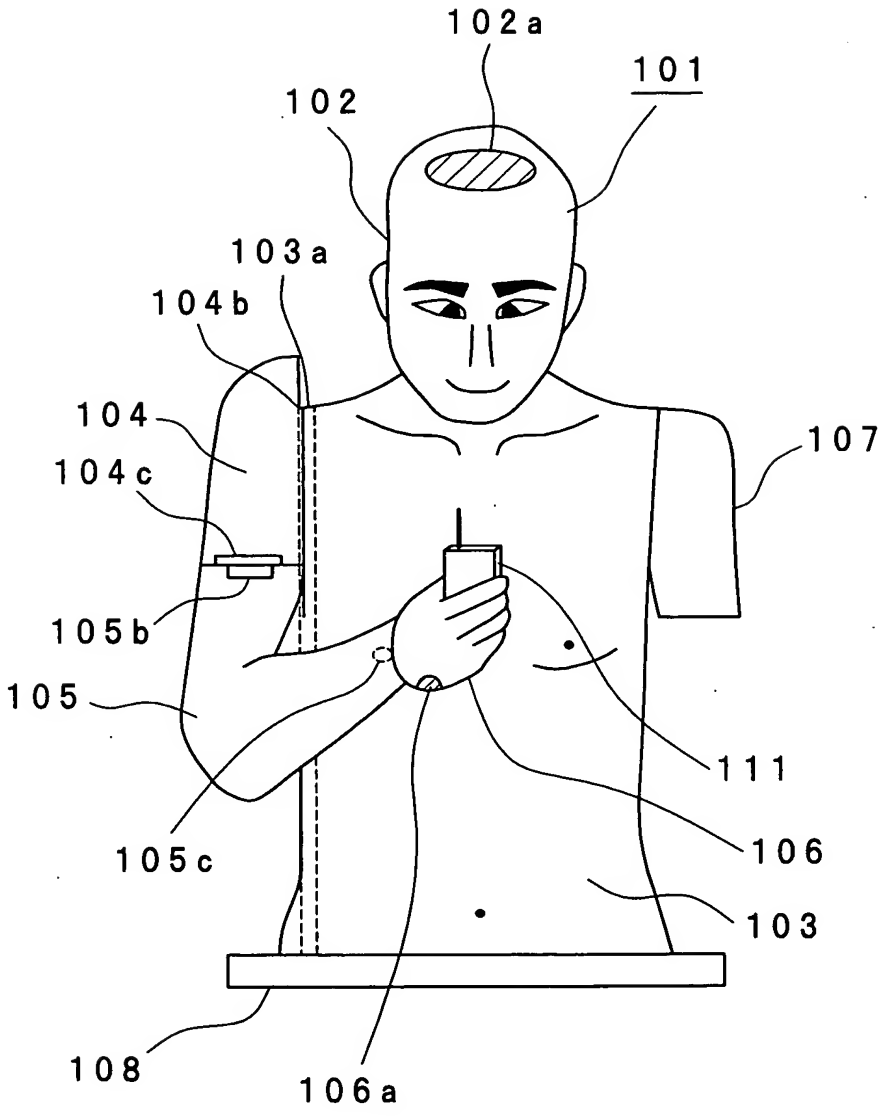

102a
101
102
103a
104b
104
104c
107
105b
105
111
105c
106
103
108
106a

Fig. 7

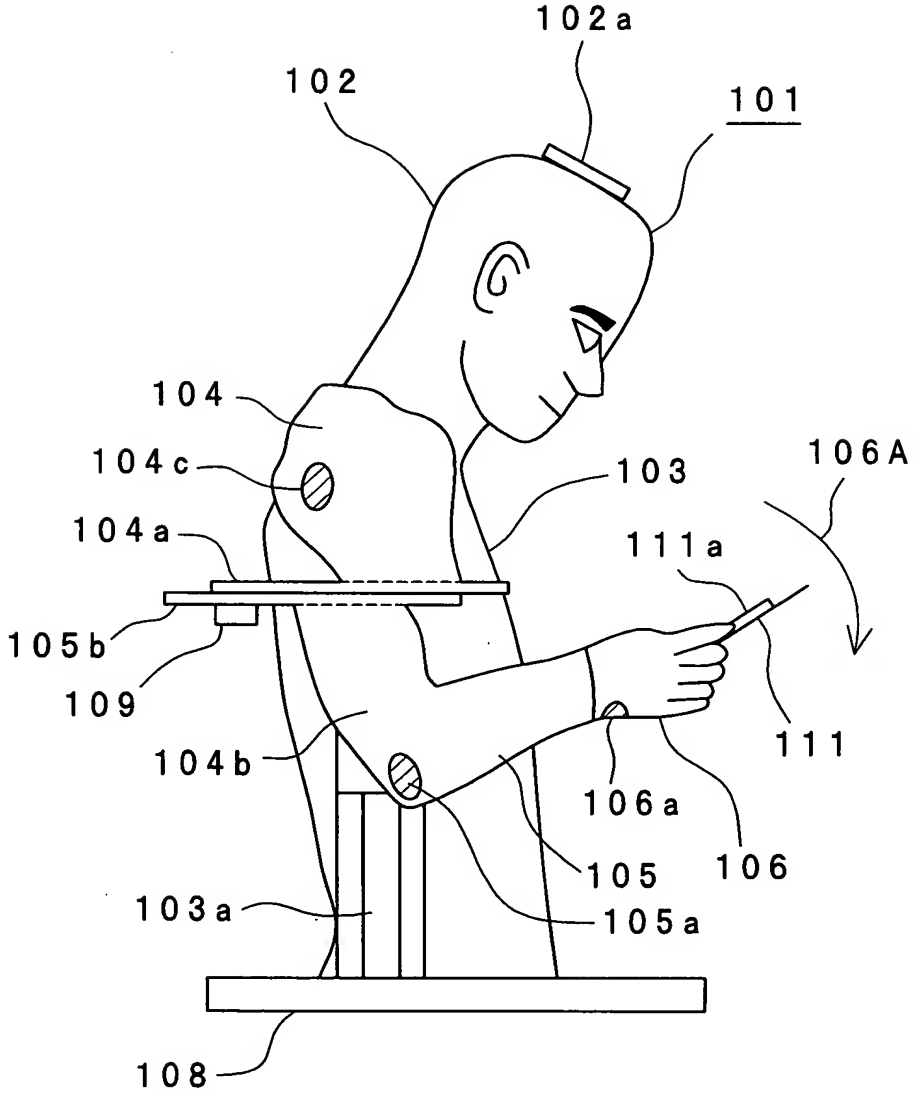

102a
102
101
104
104c
103
106A
104a
111a
105b
109
111
104b
106a
105
106
103a
105a
108

Fig. 8

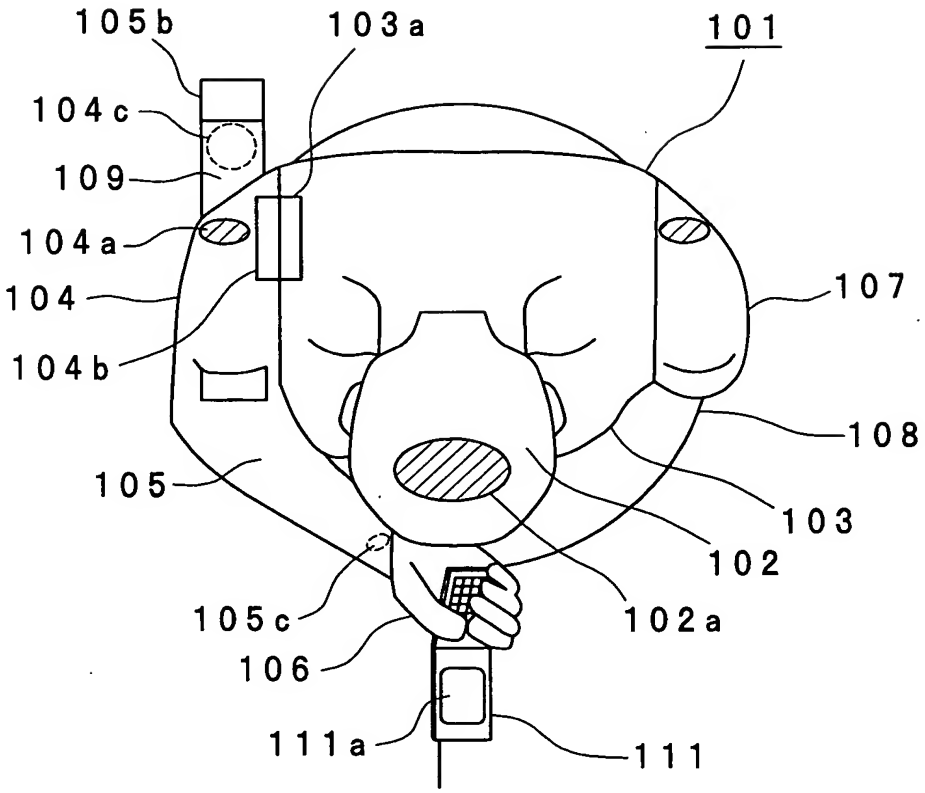

105b
103a
101
104c
109
104a
104
104b
107
108
105
103
102
105c
102a
106
111a
111

Fig. 9

MODIFIED PREFERRED EMBODIMENT OF
FIRST PREFERRED EMBODIMENT

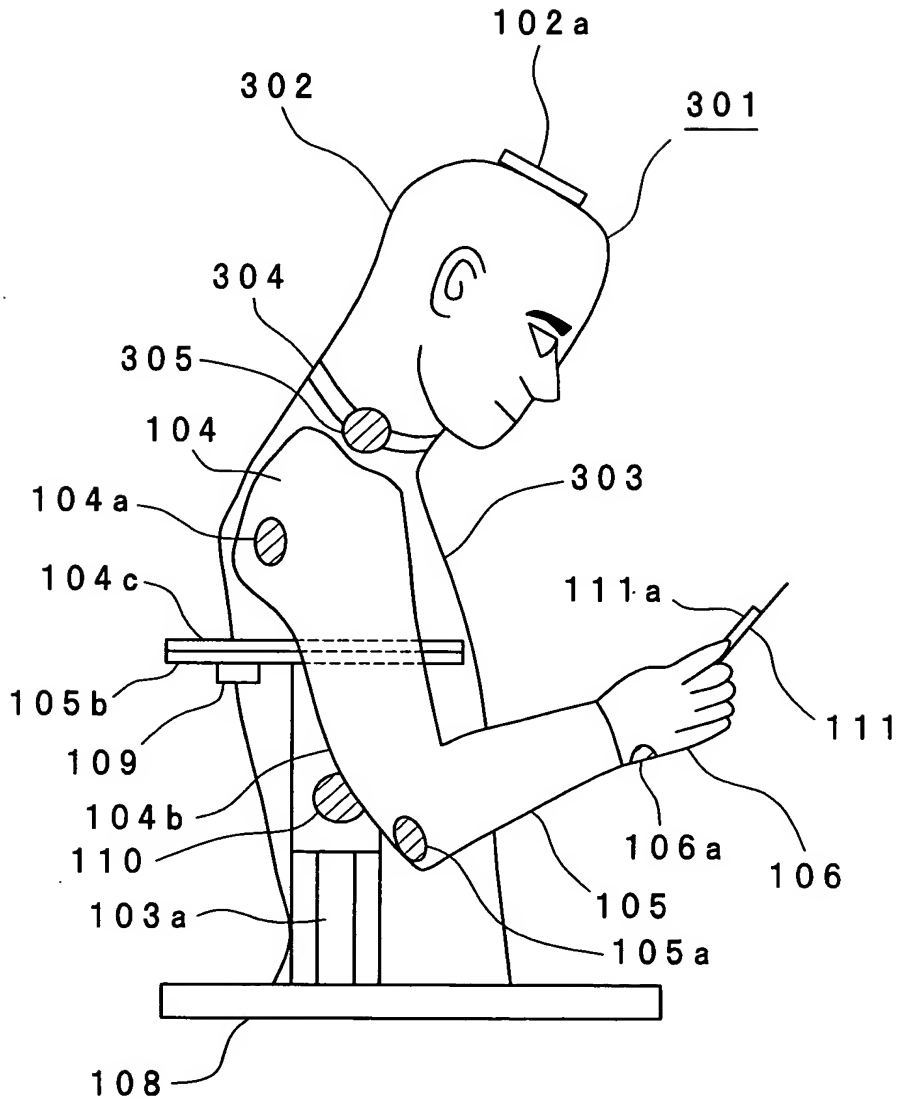


Fig. 10

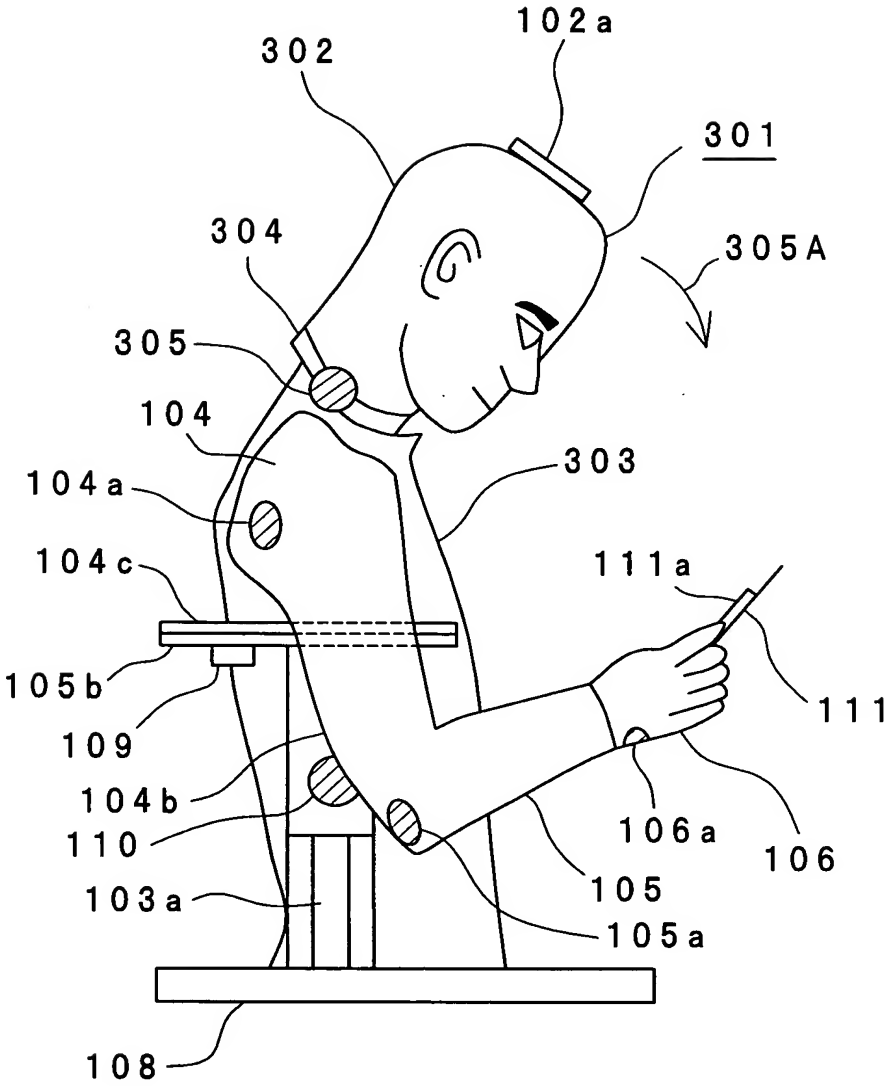

102a
302
301
304
305A
305
104
303
104a
104c
111a
105b
111
109
104b
106a
106
110
105
103a
105a
108

Fig. 11

SECOND PREFERRED EMBODIMENT

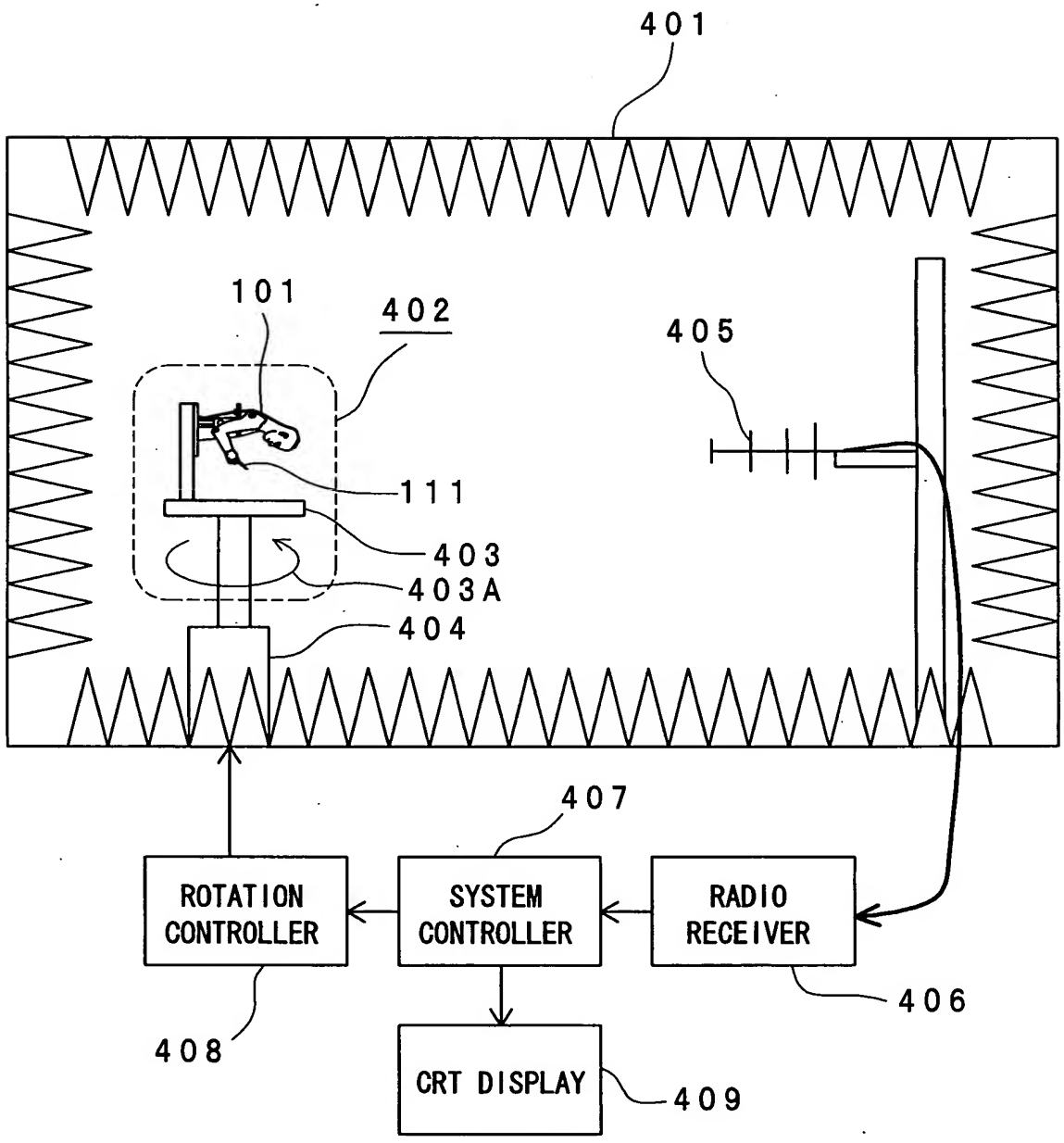


Fig. 12

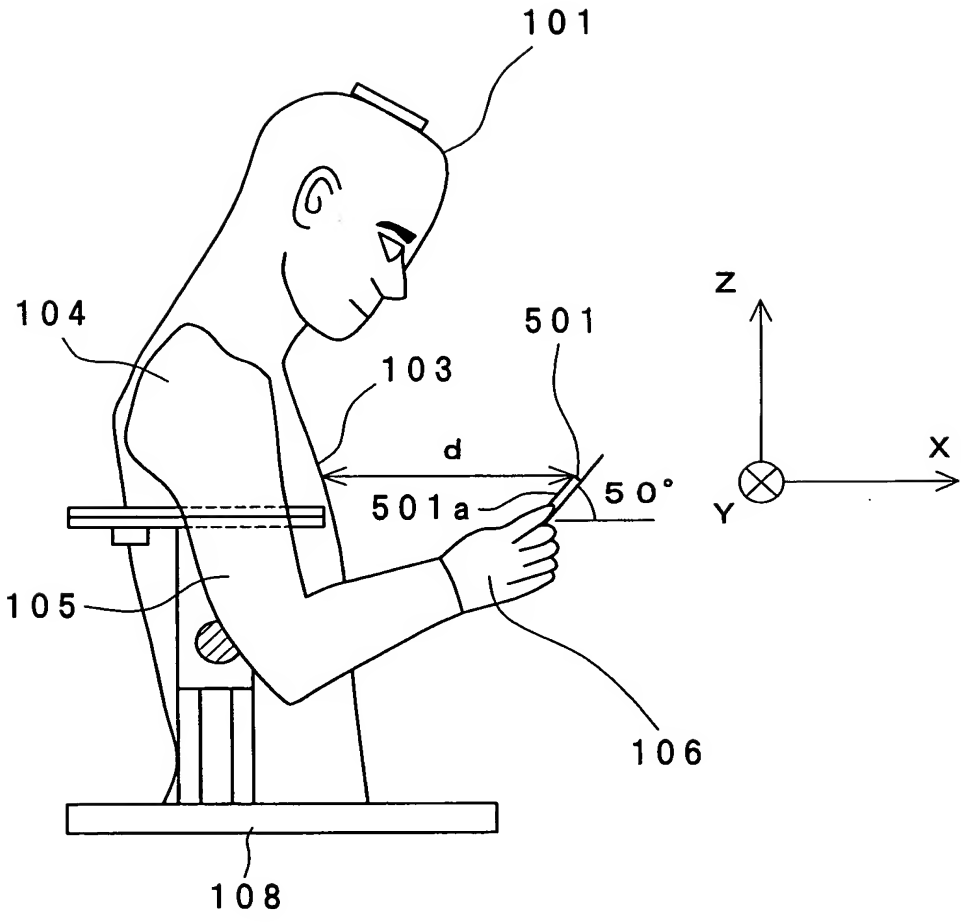


Fig. 13

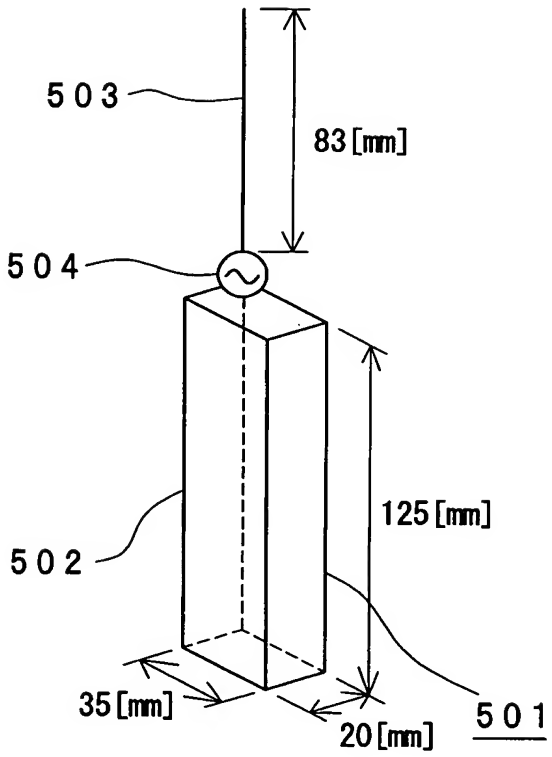


Fig. 14

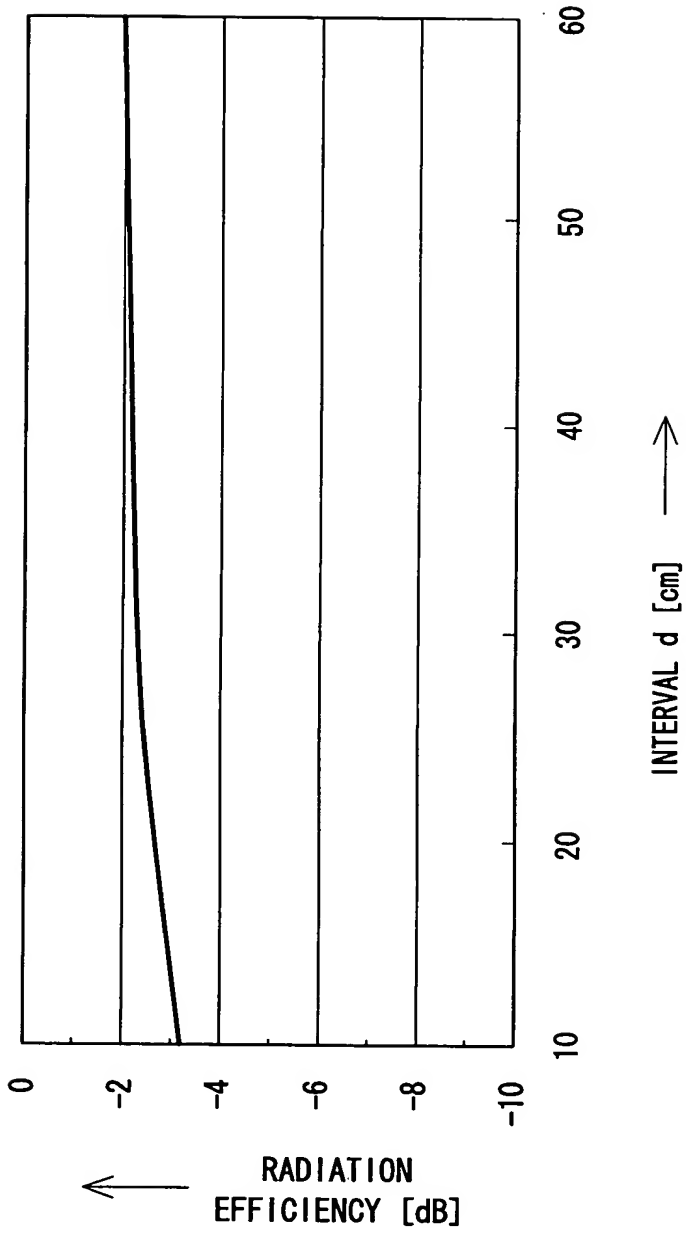

0
-2
-4
-6
-8
-10
RADIATION EFFICIENCY [dB]
10
20
30
40
50
60
INTERVAL d [cm]

Fig. 15

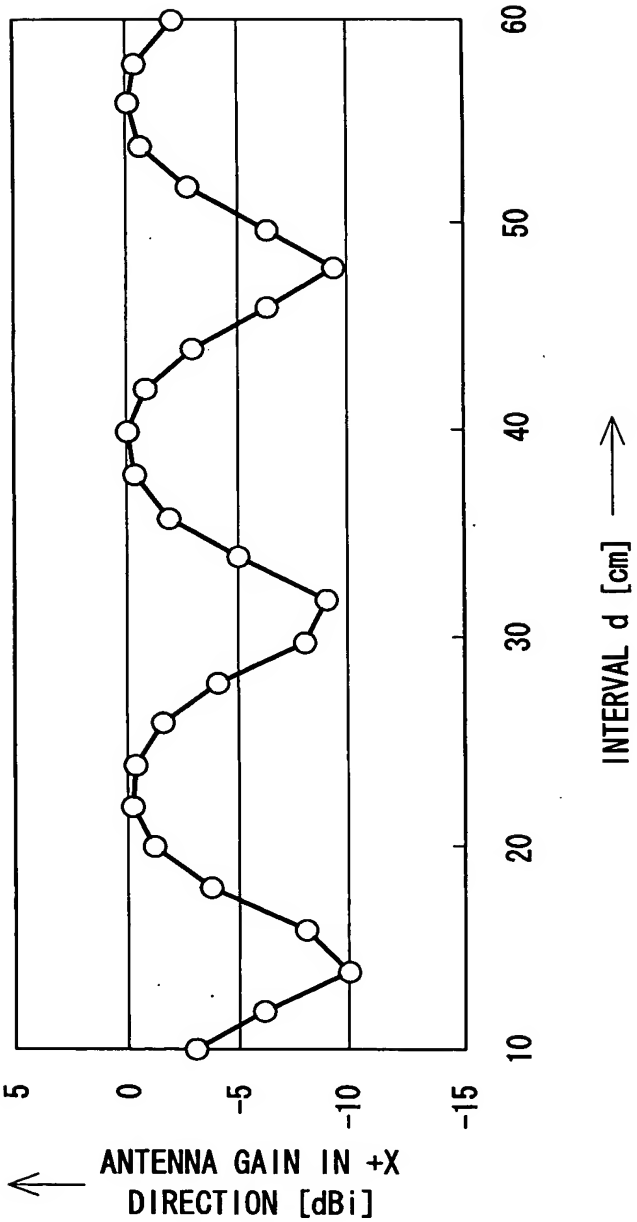

5
0
-5
-10
-15
ANTENNA GAIN IN +X DIRECTION [dBi]
10
20
30
40
50
60
INTERVAL d [cm]

Fig. 16

FIRST IMPLEMENTAL EXAMPLE

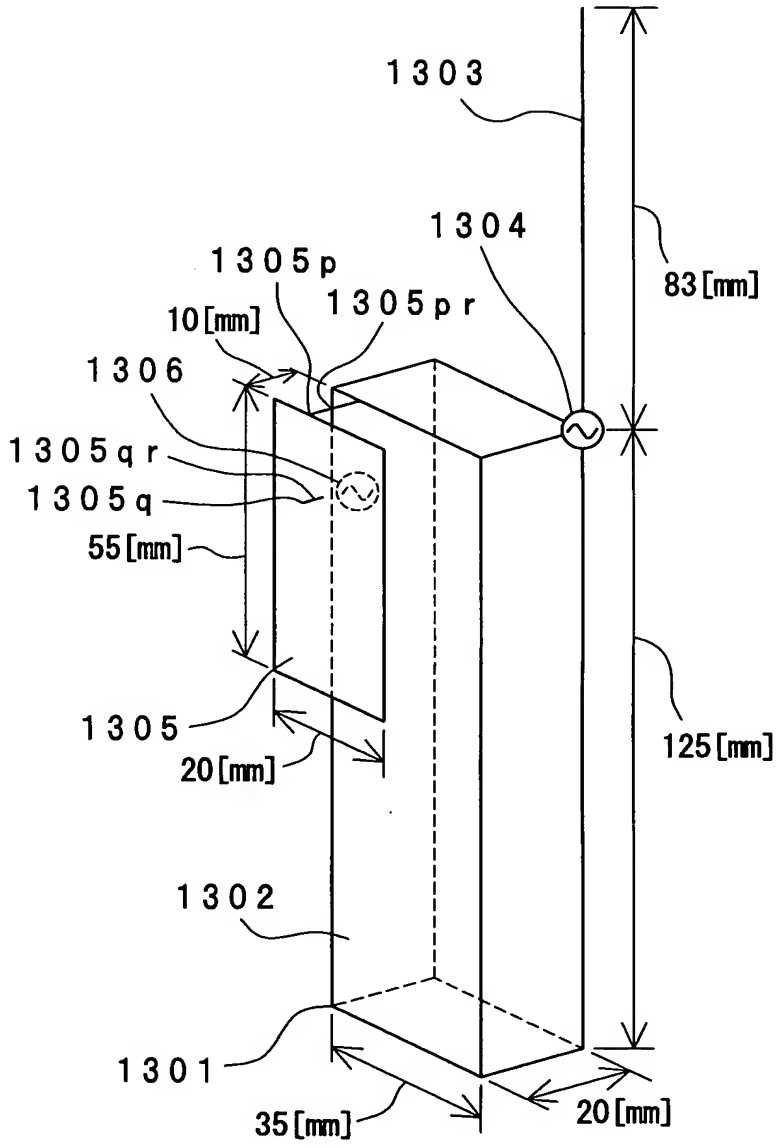


Fig. 17

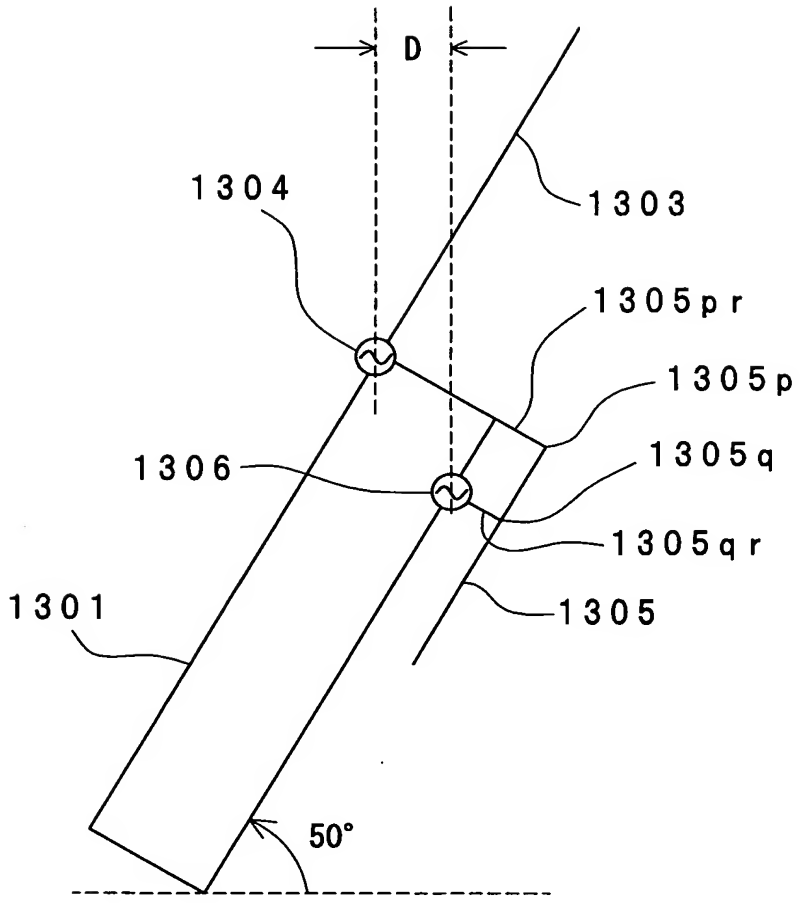


Fig. 18

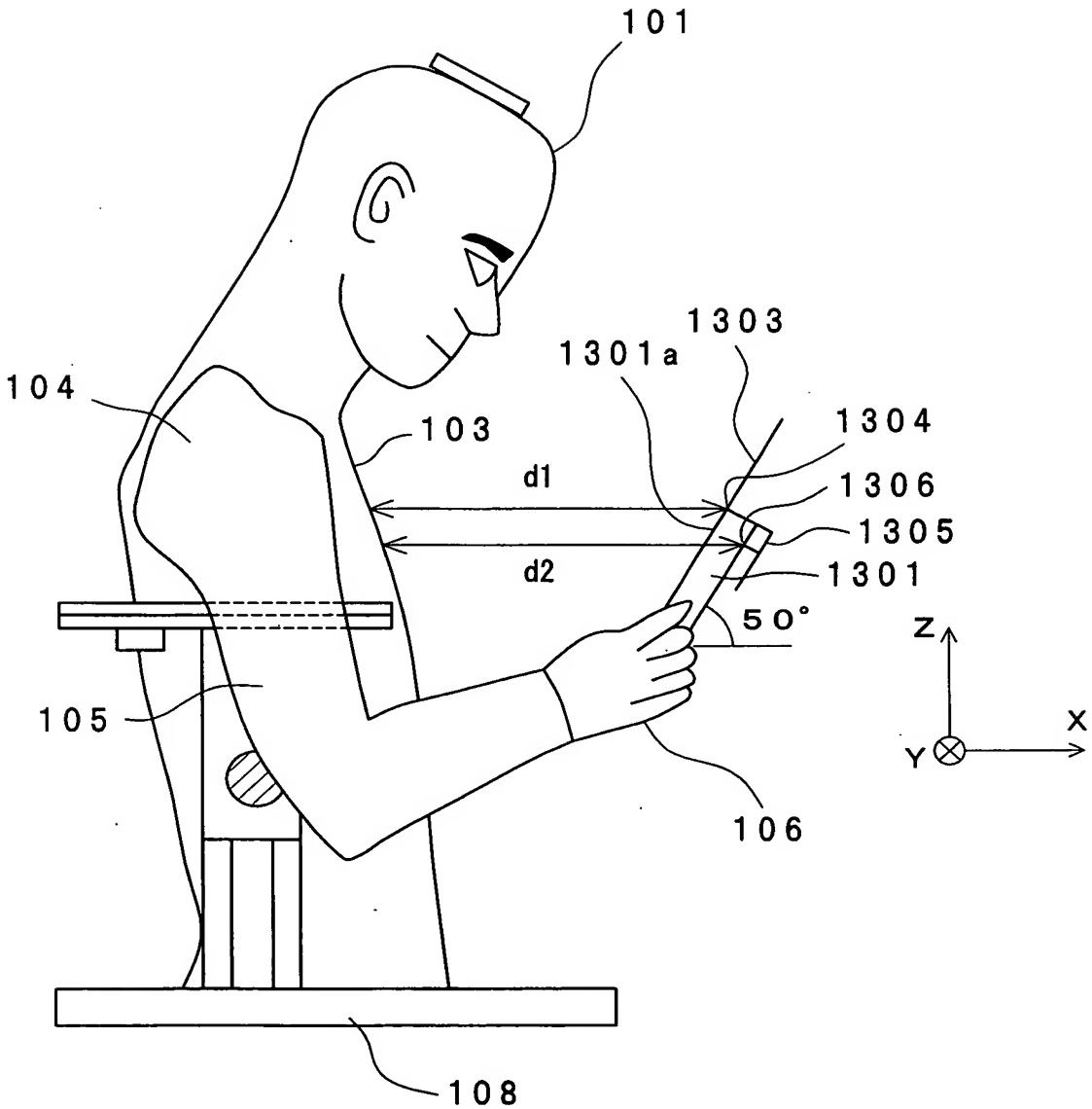

101
1303
1301a
104
1304
103
d1
1306
1305
d2
1301
50°
Z
105
X
Y
106
108

Fig. 19

SECOND IMPLEMENTAL EXAMPLE

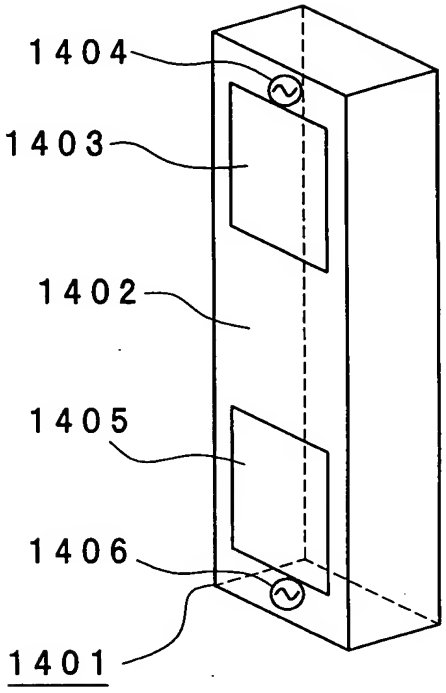


Fig. 20

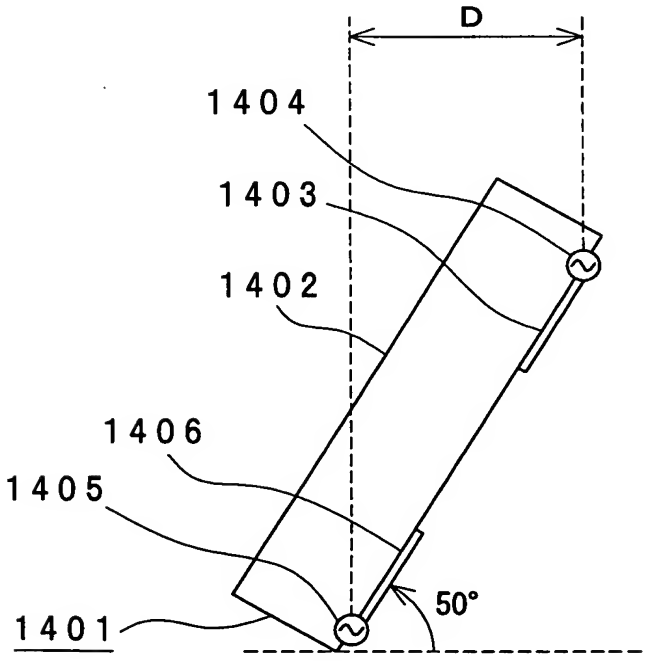


Fig. 21

THIRD PREFERRED EMBODIMENT

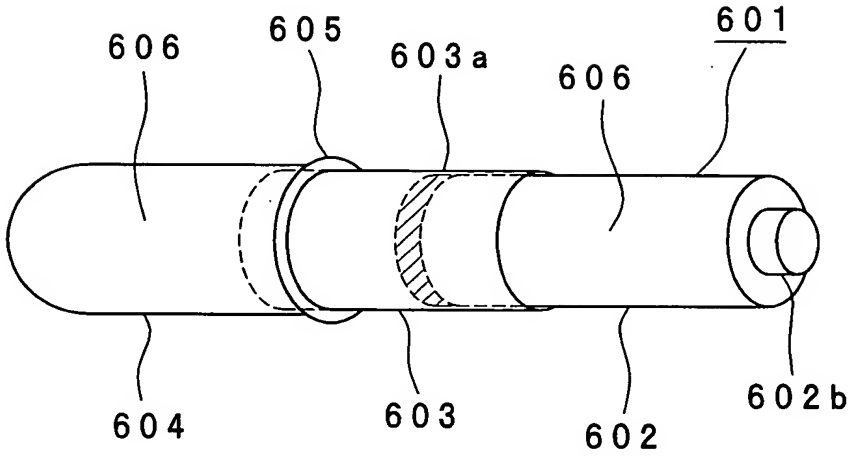


Fig. 22

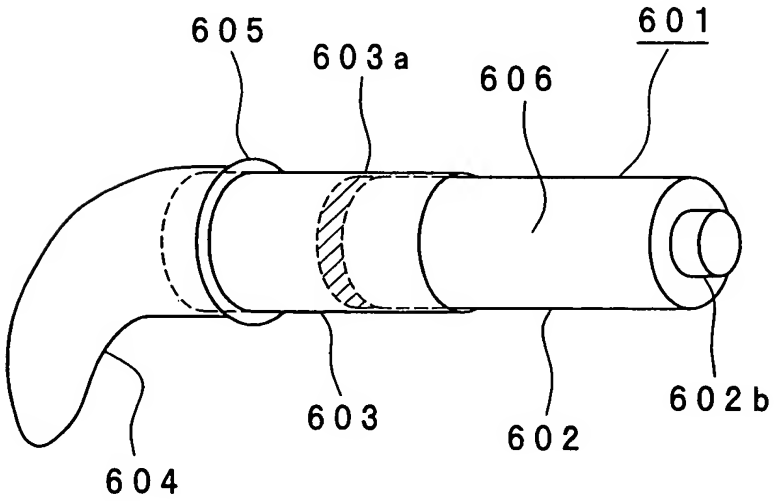


Fig. 23A Fig. 23B

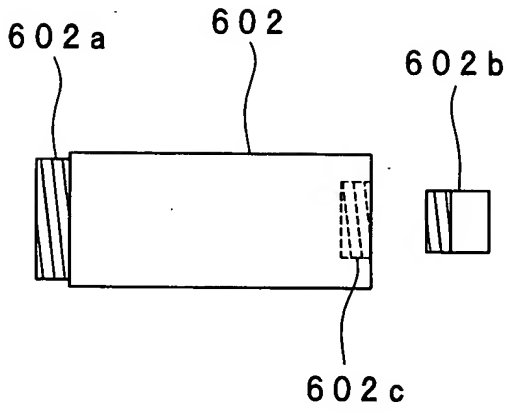


Fig. 24

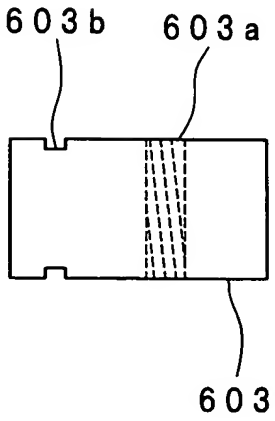


Fig. 25

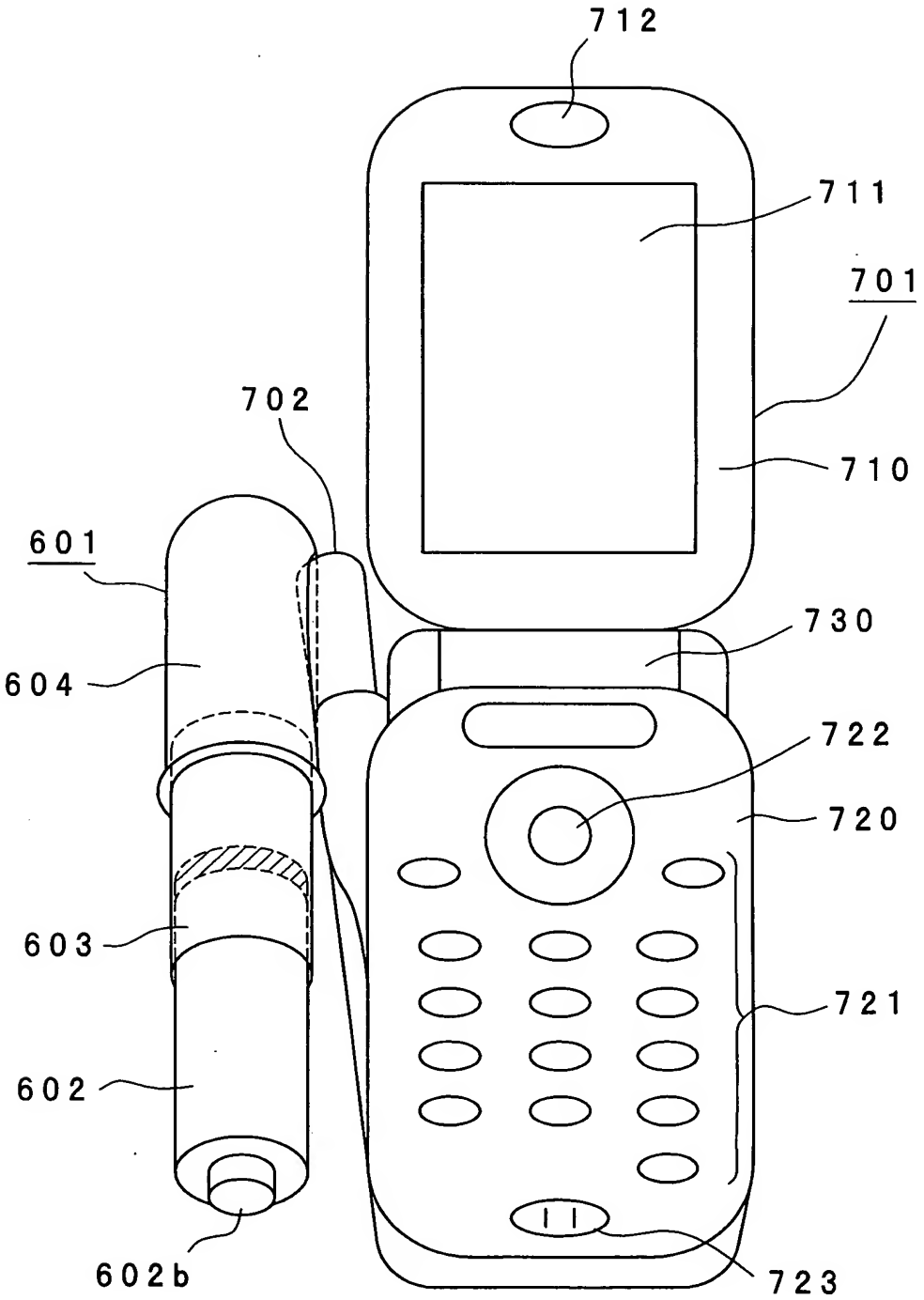


Fig. 26

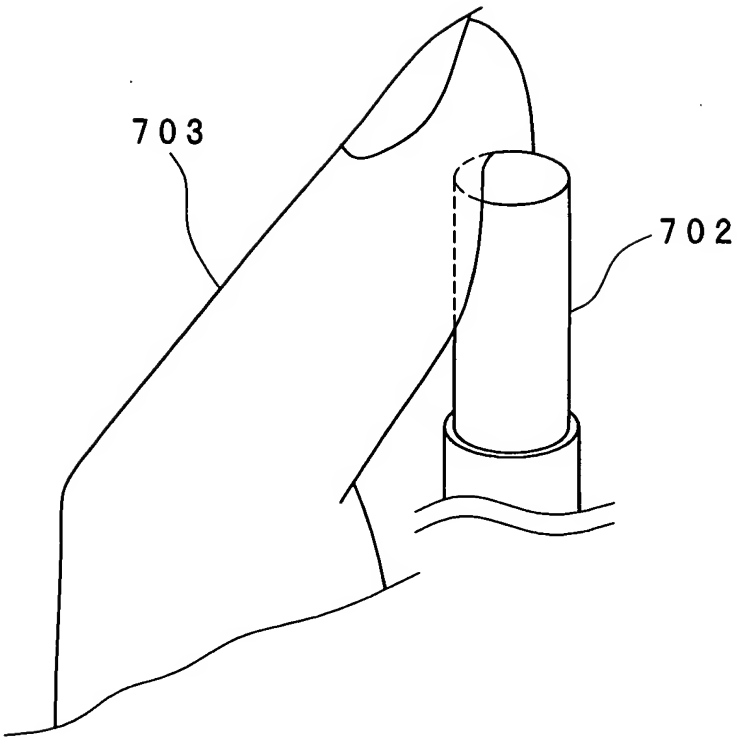


Fig. 27

MODIFIED PREFERRED EMBODIMENT OF
THIRD PREFERRED EMBODIMENT

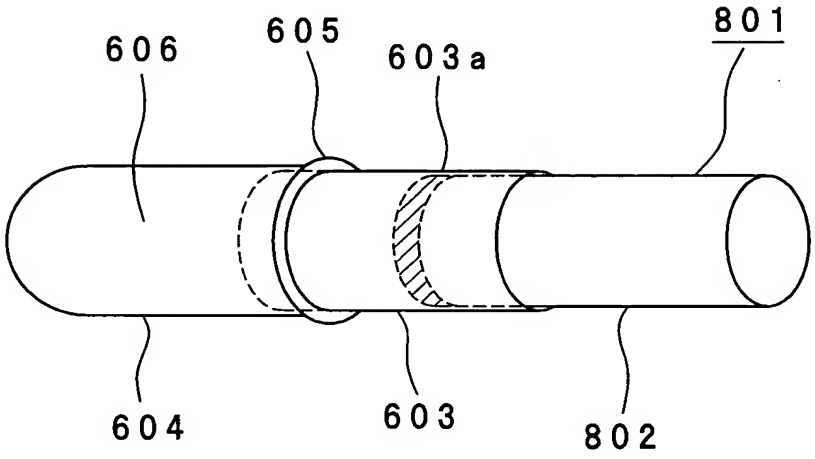


Fig. 28

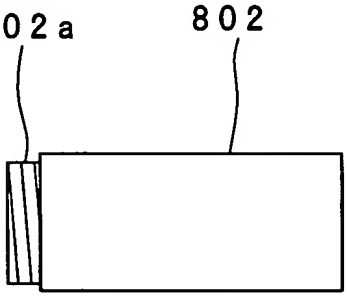


Fig. 29

FOURTH PREFERRED EMBODIMENT

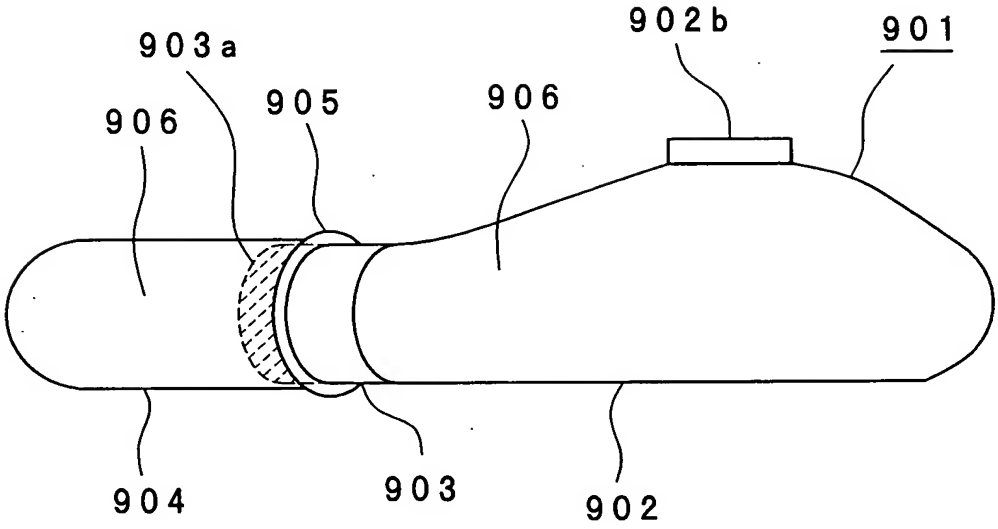


Fig. 30

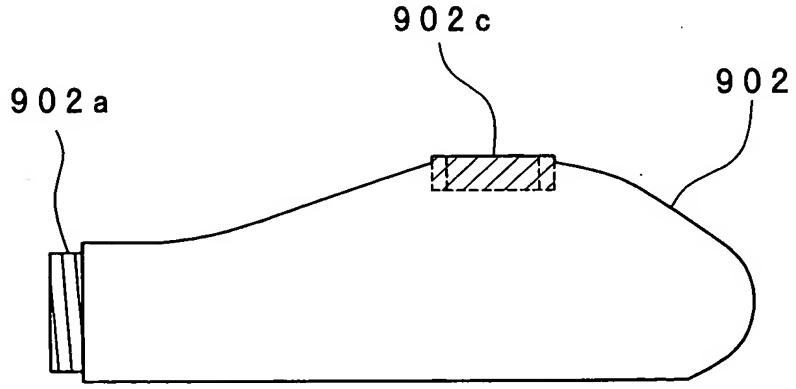


Fig. 31

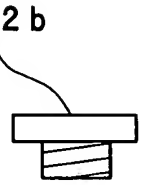


Fig. 32

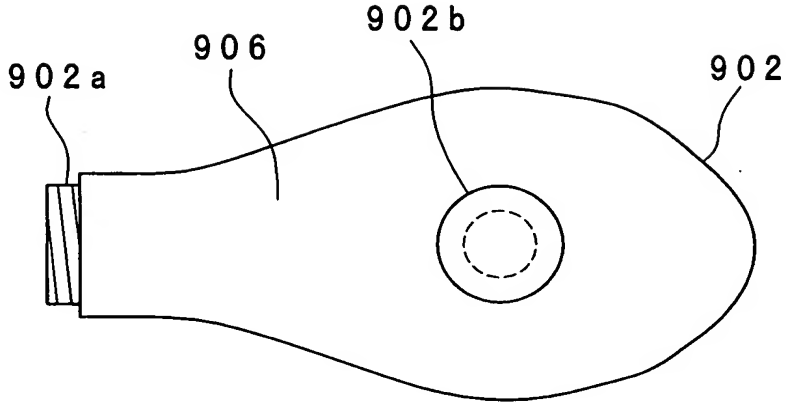


Fig. 33

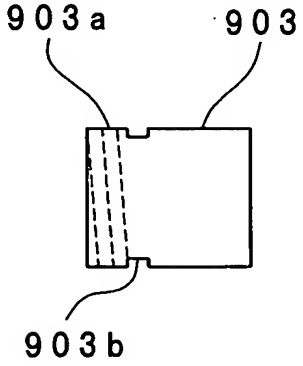
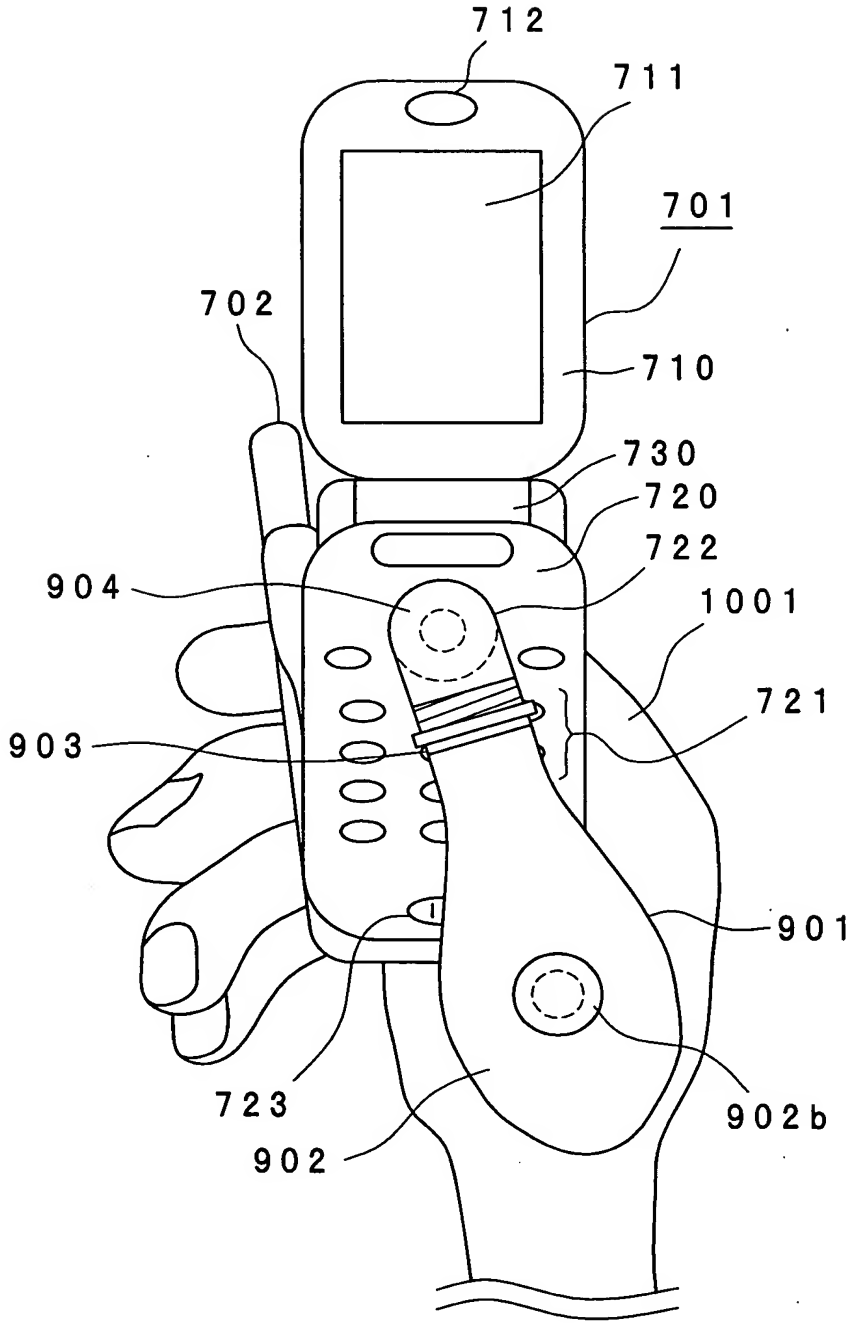


Fig. 34


712
711
701
702
710
730
720
722
904
1001
721
903
901
723
902
902b